

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

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In the Matter of:

THE ADJUSTMENT OF RATES OF THE     )  
SANDY VALLEY WATER DISTRICT     ) CASE NO. 9026

O R D E R

On April 2, 1984, Sandy Valley Water District ("Sandy Valley") filed an application with this Commission requesting authority to adjust its rates pursuant to 807 KAR 5:001. The rates proposed by Sandy Valley would produce additional annual revenues in the amount of \$47,188, representing an increase of 21 percent above actual test period revenues.

A hearing was held in this matter on September 4, 1984, at the Commission's offices in Frankfort, Kentucky. No motions for formal intervention were entered in this case, and all information requested during this proceeding has been filed. Based upon the determination herein, Sandy Valley will be allowed to adjust its rates to produce annual revenues of \$251,451, reflecting an increase of \$30,967, or 14 percent above the level of normalized test period revenues.

COMMENTARY

Sandy Valley is a non-profit water district, organized and existing under the laws of the Commonwealth of Kentucky and serves

approximately 1,302 customers in the Kentucky counties of Pike and Floyd.

#### TEST PERIOD

According to Section 6 of 807 KAR 5:001, applicants for rate adjustments must file a balance sheet and income statement for a 12-month period ending not more than 90 days prior to the filing date of the application. On April 16, 1984, Sandy Valley filed a motion with the Commission requesting a deviation from this 90-day restriction. In its motion Sandy Valley indicated that, relative to the April 2, 1984, filing of its application, its proposed financial exhibit for the 12-month period ended December 31, 1983, exceeded the 90-day filing requirement by only a few days. In addition, Sandy Valley maintained that strict adherence to the regulation would necessitate a revision of its proposed test-year financial information, which would be both burdensome and expensive.

By its Order dated April 26, 1984, the Commission granted Sandy Valley's motion for deviation and accepted the 12-month period ended December 31, 1983, as the test period for determining the reasonableness of the proposed rates. In utilizing the historic test period, the Commission has given full consideration to appropriate known and measurable changes.

#### PLANT VALUATION

##### Water Line Relocation

As a result of bridge construction within its service area, during the test period Sandy Valley relocated a portion of its water lines at a cost of \$13,431. This amount was subsequently

reimbursed to Sandy Valley by the Kentucky Transportation Cabinet ("Transportation") which was responsible for the bridge construction.

According to Mr. Stanley Justice, CPA, accountant for Sandy Valley, no entries were made to retire the relocated lines from Sandy Valley's utility plant in service accounts due to inadequate records with which to determine the original cost values of these items. It was also indicated that, due to the nature of the water line relocation, instead of being capitalized in Sandy Valley's utility plant in service accounts, the \$13,431 cost of the new lines was charged to transmission and distribution expenses, and was subsequently removed from these expense accounts upon reimbursement from Transportation.<sup>1</sup>

Adhering to the original cost concept established by the Uniform System of Accounts for Class C and D Water Utilities, the Commission is of the opinion that the original cost of the lines that were relocated should be removed from Sandy Valley's utility plant in service accounts and that the \$13,431 cost of the installation of the new water lines should be capitalized accordingly. However, as the original cost of the removed lines is not known, the Commission has concluded that a cost value should be determined for these lines on the basis of the estimated

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<sup>1</sup> Transcript of Evidence ("T.E."), September 4, 1984, pp. 23-25.

construction costs submitted by Sandy Valley in Case No. 4766.<sup>2</sup> By utilizing these estimated costs, the Commission has determined the original cost of the 145 feet of relocated line to be \$1,390.<sup>3</sup> Therefore, the Commission has reduced Account No. 343-- Transmission and Distribution Mains by \$1,390 to reflect the retirement of the relocated water lines, and has increased the balance of this account by \$13,431 to reflect the cost of the newly installed water lines. In addition, as Sandy Valley was reimbursed for all costs associated with the line relocation, the Commission is of the opinion that the \$12,041 difference between the two amounts constitutes contributed property, and has, therefore, increased Sandy Valley's contributions in aid of construction by this amount.

#### REVENUES AND EXPENSES

In its application Sandy Valley did not propose any pro forma adjustments to test-period revenues and expenses to reflect anticipated changes in its operations, although the Commission informed Sandy Valley that, in formulating a decision in this case, consideration would be given to such adjustments.<sup>4</sup>

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<sup>2</sup> The Application of Sandy Valley Water District, Floyd and Pike Counties, Kentucky, for a Certificate of Public Convenience and Necessity, Authorizing Said District to Construct a Water Distribution System Pursuant to Chapter 74 of the Kentucky Revised Statutes.

<sup>3</sup>  $145 \text{ feet} \times \$8.60 = \$1,247.$   
 $\$1,247 + \$143 \text{ (legal and administrative costs, etc.)} = \$1,390.$

<sup>4</sup> Response to Commission's Information Request dated May 22, 1984, Item No. 1.

Therefore, in determining the amount of revenue increase allowed herein, the Commission has based its findings upon Sandy Valley's actual test-period financial information, and has concluded that the following modifications will be necessary to determine a reasonable and acceptable level of projected revenues and expenses for rate-making purposes:

Revenue Normalization

For the test period ended December 31, 1983, Sandy Valley reported total revenues from water sales of \$213,632. An examination of the billing analysis which Sandy Valley submitted with its application revealed that, based upon the actual number of gallons of water sold, Sandy Valley should have realized total revenues from water sales of \$220,484. According to Mr. Justice, the discrepancy in these two amounts was attributable to the adjustment of customer accounts for water leaks and line breaks, with the adjustments being determined on the basis of the application of a fixed water loss percentage to individual customer billings.<sup>5</sup>

The Commission is of the opinion that to refund or allow credit to a customer for water loss that was experienced subsequent to the water passing through the customer's meter is not fair to all customers, as it is the responsibility of each customer to maintain his own service line in good repair. Moreover, the Commission finds that Sandy Valley should not be allowed to recoup these adjustments through rates, as such

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<sup>5</sup> T.E., September 4, 1984, pp. 19-20.

rate-making practices would be discriminatory to those customers who experienced no water loss.

Therefore, the Commission, in its determination of the level of revenues upon which to base the increase allowed herein, has increased Sandy Valley's test period revenues by \$6,852, thereby reflecting \$220,484 of revenues produced by the test-period billing analysis. This amount, combined with actual miscellaneous service revenues of \$184, results in total adjusted revenues of \$220,668.

#### Operation Supplies and Expenses

According to its statement of water operation and maintenance expenses, Sandy Valley incurred Transmission and Distribution Expenses--Operation Supplies and Expenses of \$29,981 during the test period. Documentation of these expenses was submitted by Sandy Valley in the form of a copy of its test-period general ledger,<sup>6</sup> as well as copies of invoices reflecting specific test period purchases.<sup>7</sup> An examination of these invoices revealed that several purchases requiring capitalization had been improperly classified as transmission and distribution expenses. According to Mr. Justice, the transmission and distribution expense account is reviewed at the end of each year to determine the capitalization potential of the various expense items contained therein, but no specific procedure exists whereby such items

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<sup>6</sup> Response to Commission's Information Request dated May 22, 1984, Item No. 6.

<sup>7</sup> Response to Commission's Information Request dated July 9, 1984, Item No. 4.

are recorded in the utility plant in service accounts upon purchase.<sup>8</sup> As a result of its review of the documentation submitted in support of these expenses, the Commission has determined that, of the \$29,981 reported as operation supplies and expenses, \$15,838 should be capitalized in Sandy Valley's water utility plant in service accounts as follows:

| <u>Account<br/>No.</u> | <u>Account Title</u>               | <u>Capitalized<br/>Amount</u> |
|------------------------|------------------------------------|-------------------------------|
| 343                    | Transmission and Distribution Main | \$ 1,683                      |
| 345                    | Services                           | 4,796                         |
| 346                    | Meters                             | 3,092                         |
| 374                    | Meter Installations                | 6,267                         |
|                        | Total                              | <u>\$15,838</u>               |

In determining the amount of test-period water operation and maintenance expenses to be allowed for rate-making purposes, the Commission has reduced Sandy Valley's operation supplies and expenses by \$15,836, resulting in allowable test-period transmission and distribution expenses of \$14,143. In addition, to reflect the annual depreciation expenses associated with the utility plant items requiring capitalization, the Commission has increased Sandy Valley's test-period operating expenses by \$564. This amount was calculated on the basis of the application of the depreciation rates reflected per Sandy Valley's depreciation schedule<sup>9</sup> to the respective capitalized amounts as determined herein.

<sup>8</sup> T.E., September 4, 1984, p. 26.

<sup>9</sup> Response to Commission's Information Request dated July 9, 1984, Item No. 8.

With regard to Sandy Valley's present procedure whereby invoices are reviewed annually to determine the capitalization of utility plant items, the Commission finds this method to be insufficient, as it has resulted in a misstatement of test-period operating expenses, net income and utility plant in service. The Commission recommends that Sandy Valley enact a more timely review of construction costs in accordance with the accounting policies and procedures of the Uniform System of Accounts, thereby insuring an accurate statement of Sandy Valley's net income and utility plant in service.

Depreciation Expense

During the test period Sandy Valley reported depreciation expense of \$32,433. The Commission, in accordance with its established rate-making policy, has computed Sandy Valley's depreciation expense based upon the application of a composite depreciation rate to the original cost of Sandy Valley's utility plant in service net of contributions in aid of construction. This composite rate was determined on the basis of Sandy Valley's adjusted test-period depreciation expense<sup>10</sup> expressed as a

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|----|---|-----------------|
| 10 | Depreciation Expense Associated<br>With Test-Year End Balance of<br>Utility Plant | \$33,004        |
|    | Add:  |                 |
|    | Depreciation on Newly Installed<br>Lines  | 268             |
|    | Depreciation on Items to be<br>Capitalized  | 564             |
|    | Deduct:   |                 |
|    | Depreciation on Relocated Lines   | <27>            |
|    | Adjusted Test-Period Depreciation   | <u>\$33,809</u> |



percentage of the adjusted test-period balance of utility plant in service,<sup>11</sup> resulting in a depreciation rate of 2.22 percent.<sup>12</sup> This rate was subsequently applied to Sandy Valley's adjusted balance of utility plant in service net of adjusted contributions in aid of construction<sup>13</sup> which resulted in an

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|----|---|---|
| 11 | Balance of Utility Plant at<br>December 31, 1983  | \$1,496,114                                   |
|    | Add:  |   |
|    | Water Lines Installed   | 13,431  |
|    | Items Requiring Capitalization  | 15,838  |
|    | Deduct:   |   |
|    | Cost of Relocated Lines   | <u>&lt;1,390&gt;</u>                          |
|    | Adjusted Balance of Utility<br>Plant in Service   | <u>\$1,523,993</u>                            |
| 12 | Adjusted Test Period Depreciation<br>Adjusted Utility Plant in Service ÷<br>Composite Depreciation Rate | \$ 33,809<br><u>1,523,993</u><br><u>2.22%</u> |
| 13 | Test-Year-End Contributions in<br>Aid of Construction   | \$919,239                                     |
|    | Add:  |   |
|    | Contributions Associated with<br>Water Line Installations   | <u>12,041</u>                                 |
|    | Adjusted Contributions in Aid<br>of Construction  | <u>\$931,280</u>                              |

adjusted depreciation expense of \$13,158.<sup>14</sup> Therefore, to reflect this allowable amount, the Commission has reduced Sandy Valley's test-period operating expense by \$19,275.

After consideration of the aforementioned adjustments, the Commission finds Sandy Valley's adjusted test period operations to be as follows:

|                               | <u>Actual<br/>Test Period</u> | <u>Pro Forma<br/>Adjustments</u> | <u>Adjusted<br/>Test Period</u> |
|-------------------------------|-------------------------------|----------------------------------|---------------------------------|
| Operating Revenues            | \$213,816                     | \$ 6,852                         | \$220,668                       |
| Operating Expenses            | 262,695                       | <35,113>                         | 227,582                         |
| Net Operating Income          | \$<48,879>                    | \$ 41,965                        | \$ <6,914>                      |
| Interest Income               | 14,591                        | -0-                              | 14,591                          |
| Interest on Long-Term<br>Debt | 20,508                        | -0-                              | 20,508                          |
| Net Income                    | <u>\$&lt;54,796&gt;</u>       | <u>\$ 41,965</u>                 | <u>\$&lt;12,831&gt;</u>         |

#### REVENUE REQUIREMENTS

Sandy Valley stated that its test-period revenue requirements and requested increase were determined on the basis of the recovery of the \$54,796 operating loss sustained during the test period; hence, its proposed rates were structured to produce an amount of revenue that would absorb this loss.<sup>15</sup> Having considered the information submitted in this proceeding,

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| <sup>14</sup> | Adjusted Utility Plant in Service                | \$1,523,993      |
|               | Less:  |                  |
|               | Adjusted Contributions in Aid of<br>Construction | 931,280          |
|               | Net Utility Plant in Service                     | \$ 592,713       |
|               | Composite Depreciation Rate                      | 2.22%            |
|               | Allowable Test-Period Depreciation<br>Expense    | <u>\$ 13,158</u> |

<sup>15</sup> Response to Commission's Information Request dated July 9, 1984, Item No. 2.

the Commission finds the debt-service coverage method of revenue determination to be the appropriate method with which to calculate Sandy Valley's revenue requirements, and has utilized this method in determining the amount of revenue increase allowed herein.

In its calculations, the Commission has applied a 1.2X debt-service coverage factor to a 5-year average of Sandy Valley's principal and interest payments, resulting in a debt-service coverage of \$38,644. This amount, combined with Sandy Valley's allowable operating expenses of \$227,582, produces a revenue requirement of \$266,226.

#### RATE DESIGN

Sandy Valley proposed to increase the water usage rates for 5/8-inch metered service. However, it did not propose to increase rates for other categories of metered service, thus giving a relative price advantage to some customers. This is inconsistent with standard Commission rate design practice. Therefore, the Commission has increased the rates for other metered service categories corresponding to the increase for 5/8-inch water usage rates.

#### SUMMARY

The Commission, having considered the evidence of record and being advised, is of the opinion and finds that:

1. The rates in Appendix A are the fair, just and reasonable rates to be charged by Sandy Valley, as they will produce annual revenues of \$251,451. This revenue, combined with other income of \$14,775 will be sufficient to meet Sandy Valley's

operating expense found reasonable for rate-making purposes, service its debt and provide a reasonable surplus.

2. The rates proposed by Sandy Valley would produce revenue in excess of that found reasonable herein and should be denied.

3. Sandy Valley's accounting records are not in compliance with the reporting requirements established by the Uniform System of Accounts for Class C and D Water Utilities, as it has improperly recorded as expenses items of utility plant which should be recorded in the utility plant in service accounts.

IT IS THEREFORE ORDERED that the rates in Appendix A be and they hereby are approved for service rendered by Sandy Valley on and after the date of this Order.

IT IS FURTHER ORDERED that the rates proposed by Sandy Valley be and they hereby are denied.

IT IS FURTHER ORDERED that Sandy Valley shall maintain its accounting records in compliance with the reporting requirements established by the Uniform System of Accounts for Class C and D Water Utilities, and shall properly record items of utility plant in the appropriate utility plant in service accounts.

IT IS FURTHER ORDERED that within 30 days of the date of this Order, Sandy Valley shall file its revised tariff sheets setting forth the rates approved herein.

Done at Frankfort, Kentucky, this 15th day of November, 1984.

PUBLIC SERVICE COMMISSION

Richard D. Lemons  
Chairman

[Signature]  
Vice Chairman

[Signature]  
Commissioner

ATTEST:

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Secretary

APPENDIX A

APPENDIX TO AN ORDER OF THE PUBLIC SERVICE  
COMMISSION IN CASE NO. 9026 DATED 11/15/84

The following rates are prescribed for customers in the area served by Sandy Valley Water District. All other rates and charges not specifically mentioned herein shall remain the same as those in effect under authority of the Commission prior to the effective date of this Order.

| <u>Customer Category</u>           |                 | <u>Monthly Rate</u>    |
|------------------------------------|-----------------|------------------------|
| <u>5/8-Inch Meter Size Service</u> |                 |                        |
| First                              | 2,000 gallons   | \$ 5.70 Minimum Bill   |
| Next                               | 3,000 gallons   | 2.00 per 1,000 gallons |
| Next                               | 15,000 gallons  | 1.80 per 1,000 gallons |
| Next                               | 30,000 gallons  | 1.25 per 1,000 gallons |
| Next                               | 50,000 gallons  | .90 per 1,000 gallons  |
| Over                               | 100,000 gallons | .80 per 1,000 gallons  |
| <u>3/4-Inch Meter Service</u>      |                 |                        |
| First                              | 3,000 gallons   | \$ 7.70 Minimum Bill   |
| Next                               | 2,000 gallons   | 2.00 per 1,000 gallons |
| Next                               | 15,000 gallons  | 1.80 per 1,000 gallons |
| Next                               | 30,000 gallons  | 1.25 per 1,000 gallons |
| Next                               | 50,000 gallons  | .90 per 1,000 gallons  |
| Over                               | 100,000 gallons | .80 per 1,000 gallons  |

1-Inch Meter Service

|       |                 |                        |
|-------|-----------------|------------------------|
| First | 5,000 gallons   | \$11.70 Minimum Bill   |
| Next  | 15,000 gallons  | 1.80 per 1,000 gallons |
| Next  | 30,000 gallons  | 1.25 per 1,000 gallons |
| Next  | 50,000 gallons  | .90 per 1,000 gallons  |
| Over  | 100,000 gallons | .80 per 1,000 gallons  |

1 1/2-Inch Meter Service

|       |                 |                        |
|-------|-----------------|------------------------|
| First | 10,000 gallons  | \$20.70 Minimum Bill   |
| Next  | 10,000 gallons  | 1.80 per 1,000 gallons |
| Next  | 30,000 gallons  | 1.25 per 1,000 gallons |
| Next  | 50,000 gallons  | .90 per 1,000 gallons  |
| Over  | 100,000 gallons | .80 per 1,000 gallons  |

2-Inch Meter Service

|       |                 |                        |
|-------|-----------------|------------------------|
| First | 25,000 gallons  | \$44.95 Minimum Bill   |
| Next  | 25,000 gallons  | 1.25 per 1,000 gallons |
| Next  | 50,000 gallons  | .90 per 1,000 gallons  |
| Over  | 100,000 gallons | .80 per 1,000 gallons  |

3-Inch Meter Service

|       |                 |                       |
|-------|-----------------|-----------------------|
| First | 60,000 gallons  | \$85.20 Minimum Bill  |
| Next  | 40,000 gallons  | .90 per 1,000 gallons |
| Over  | 100,000 gallons | .80 per 1,000 gallons |

4-Inch Meter Service

|       |                 |                       |
|-------|-----------------|-----------------------|
| First | 100,000 gallons | \$121.20 Minimum Bill |
| Over  | 100,000 gallons | .80 per 1,000 gallons |

6-Inch Meter Service

First 300,000 gallons

\$281.20 Minimum Bill

Over 300,000 gallons

.80 per 1,000 gallons

WHOLESALE WATER SERVICE

All usage

.80 per 1,000 gallons